REMARKS

This application has been carefully considered in connection with the Examiner's Final Office Action dated August 9, 2007. Reconsideration and allowance are respectfully requested in view of the following.

Summary of Rejections

Claims 1-26 were pending at the time of the Office Action.

Claim 24 was objected.

Claims 6-26 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, has possession of the claimed invention.

Claims 1-11, 17-20 and 24-26 were rejected under 35 U.S.C. §102(e) as being anticipated by Gungabeesoon, U.S. Patent No. 7,007,278 (hereinafter "Gungabeesoon").

Claims 12-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gungabeesoon, U.S. Patent No. 7,007,278 in view of Vermeire et al., U.S. Patent No. 6,931,623 (hereinafter "Vermeire").

Claims 15 and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gungabeesoon, U.S. Patent No. 7,007,278 in view of Ahmad et al., U.S. Patent No. 5,745,748 (hereinafter "Ahmad").

9

Claims 21-23 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gungabeesoon, U.S. Patent No. 7,007,278.

Summary of Response

Claims 1, 6, 21, and 24 are currently amended.

Claims 11, 19, 22, and 23 were previously presented.

Claims 2-5, 7-10, 12-18, 20, 25, and 26 remain as originally submitted.

Remarks and Arguments are provided below.

Summary of Claims Pending

Claims 1-26 are currently pending following this response.

Response to Objections

Claim 24 was objected to because of informalities. Claim 24 has been amended to read -- operating system --. This typographical error has been amended as suggested in the Final Office Action.

Response to Rejections

The Final Office Action responded to the various arguments presented in the response filed on July 18, 2007. Below is a detailed discussion of each of the responses in the Final Office Action.

I.   Response to the Interpretations presented in Section (a).

In section (a) of the Response to Arguments, the Final Office Action relied on the disclosure of Gungabeesoon in element 410 of Fig. 5; Fig. 6; column 10, lines 62-65; and column 11, lines 13-18. The Final Office Action presented a new interpretation of the Gungabeesoon reference where the legacy application is the claimed COBOL program and the I/O instruction of the legacy application is now interpreted as the claimed COBOL routine. Applicant notes that Claim 1 requires, "the COBOL routine reads information from the socket". Applicant respectfully submits that the I/O instruction of the legacy application in Gungabeesoon does not **read** information from the socket. The Final Office Action indicated in the arguments of section (a), "Note that the input data is **forwarded** to the legacy application via the application socket" (emphasis added). Data being forwarded from the socket to the legacy application is not the same as reading data from the socket as required by the claims.

The cited portions of Gungabeesoon disclose that output data is sent to the application runtime component 430 (i.e., the operating system). The operating system then calls a Write_Data method to write the data to redirect the data to a socket. Therefore, the I/O instruction of Gungabeesoon does not write information to the socket, but rather sends data to the operating system. The operating system then calls a method to redirect the output data to the socket.

Similarly, input data received from the socket is read by the operating system through a Read_Data method. Applicant notes column 10, lines 29-31 disclose, "The operating system application runtime 430 calls the Read_Data and Write_Data methods

11

to redirect data flow between the application and the internet."   Applicant further notes that Gungabeesoon discloses in column 8, lines 14-17, "Each legacy application 122 has data 422 to be input/output to/from the application runtime operating system 430 according to the program I/O code 410 through the compiler runtime 420." Gungabeesoon also discloses in column 8, lines 32-35, "Input data follows the reverse path: the application runtime 430 extracts the input data from the inbound data stream, formats the data which is then submitted to the application as user input data." Therefore the operating system submits the data received from the socket to the legacy application which was waiting on an input instruction.

By having the operating system perform all of the communications with the socket through the Data_Read and Data_Write methods, "the legacy application 122 is unaware of any changes in its native environment, thus requiring no code changes to the application" (Gungabeesoon: Column 9, lines 38-40). Therefore, it is clear that the I/O instruction does not read information from the socket as required by Claim 1, but simply receives the data from the operating system.

Further, Applicant respectfully submits that an I/O instruction is not a "routine". Merriam-Webster's Online Dictionary defines the term "instruction" as "a code that tells a computer to perform a particular operation".   On the other hand, Merriam-Webster's Online Dictionary defines the term "routine" as "a sequence of computer instructions for performing a particular task".   Therefore, it is clear that the single I/O instruction in the legacy application of Gungabeesoon is not a "routine" as claimed.

12

II.   Response to the Interpretations presented in Section (c).

In section (c) of the Response to Arguments, the Final Office Action argued that the COBOL routine reads the information from the socket through a call to an operating system. Applicant notes that the cited portion of Gungabeesoon discloses, "The input data is forwarded ... eventually to the legacy program 122 that was waiting". The cited portion of Gungabeesoon does not disclose that the I/O instruction of the legacy application calls the operating system. Rather, as discussed in detail above and disclosed in the cited portion of Gungabeesoon, the legacy application simply waits for the operating system to forward data to it. Gungabeesoon discloses in column 8, lines 32-35, "Input data follows the reverse path: the application runtime 430 extracts the input data from the inbound data stream, formats the data which is then submitted to the application as user input data." Therefore the legacy application does not call the operating system. Rather, the operating system submits the data received from the socket to the legacy application which was waiting on an input instruction.

One of the problems addressed by the pending application is that COBOL doesn't have native interface support (such as POSIX) to readily interact with and utilize services of the operating system. Through calls to the claimed COBOL routine described in paragraphs 028-050 of the specification, the COBOL program is enabled to read and write information to sockets. The COBOL routine in turn makes bit-level calls to functions of the operating system. Therefore the pending claims modify the COBOL programming language through the use of the COBOL routine to provide support for the COBOL program to make a call (through the COBOL routine) to read and write to sockets. In

13

contrast, Gungabeesoon discloses to modify the operating system to encapsulate the legacy application such that operating system may redirect data to/from the legacy application. As noted above, "the legacy application 122 is unaware of any changes in its native environment, thus requiring no code changes to the application".

III.   <u>Gungabeesoon does not disclose a bit-level call to the operating system.</u>

The pending disclosure is directed to addressing the limitations of the COBOL programming language. Paragraph 006 of the present disclosure states:

> "Unfortunately, COBOL is severely limited in a number of areas compared to the processing techniques available to developers that use other languages such as C or JAVA. POSIX, or Portable Operating System Interface uniX, is a standard UNIX interface for applications to ensure interoperability on equipment from various venders. POSIX includes well know functionality available in programming languages such as C and JAVA for accomplishing distributed and asynchronous processing, such as shared memory, memory and message queues, threads, semaphores and mutexes, events, signal handlers, and sockets."

Further, paragraph 008 of the present disclosure states:

> "The processing techniques described above are examples of useful functionality widely available to programmers using distributed and asynchronous processing languages, such as C and JAVA, but unavailable in COBOL. Frequently, it is desirable for business processes employing COBOL applications to accomplish distributed and asynchronous processing. Although the COBOL language has limitations, it is difficult for businesses with a significant investment in COBOL programs to justify abandoning the COBOL applications and redeveloping the applications using a more modern and flexible language, such as C or JAVA. Instead, COBOL systems are typically provided with an interface or "hook" to enable the COBOL program to cooperate with, for example, C or JAVA programs. The C or Java program then performs the distributed and asynchronous processing tasks that the COBOL application is otherwise incapable of handling independently."

The present disclosure utilizes a technical layer that defines bit level mappings of calls to functions of an operating system so as to interface with the operating system in

14

order to enable COBOL programs to perform asynchronous and distributed processing tasks. In an embodiment, the technical layer may be implemented as a library of callable routines that are linked to the COBOL programs. In other embodiments, the technical layer may be implemented as a pre-compiler or a compiler, for example. The technical layer is described in detail in paragraphs 026-039 wherein a discussion of the bit level mapping of calls is discussed in paragraphs 041-046.

With the technical layer defining how to interface with functions of the operating system additional interfaces with other high level programming languages are not necessary. This enables COBOL programs to be executed in their native COBOL runtime environment so as to take advantage of the inherent efficiencies of COBOL programming while also being able to perform distributed and asynchronous processing tasks.

While Gungabeesoon similarly discloses in column 9, lines 38-40 that the legacy application 122 is unaware of any changes in its native environment, Gungabeesoon does not disclose any bit-level calls to the operating system as required by the claims. Rather, as discussed in detail above, the operating system encapsulates the legacy application 122 such that it is unaware of any changes to its native environment. That is, data is directed to/from the legacy application 122 under control of the operating system. Further, it is clear that the I/O instructions of the legacy application 122 are not bit-level calls to the operating system. Also, Applicant notes that a search for the term "bit" in Gungabeesoon did not produce any results.

15

Response to Rejections under Section 112

In the Final Office Action dated August 9, 2007, Claims 6-26 were rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Office Action indicated that Claims 6-26 recite a computer readable medium as a claimed element. The subject matter is not properly described in the application as filed, since the originally-filed specification lacks disclosure on a computer readable medium. Because the specification does not adequately support the claimed subject matter, it would not reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, has possession of the claimed invention.

Applicant respectfully notes MPEP 2163.04 states:

"The inquiry into whether the description requirement is met must be determined on a case-by-case basis and is a question of fact. *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976). A description as filed is presumed to be adequate, unless or until sufficient evidence or reasoning to the contrary has been presented by the examiner to rebut the presumption. See, e.g., *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971). The examiner, therefore, must have a reasonable basis to challenge the adequacy of the written description. **The examiner has the initial burden of presenting by a preponderance of evidence why a person skilled in the art would not recognize in an applicant's disclosure a description of the invention defined by the claims.** *Wertheim*, 541 F.2d at 263, 191 USPQ at 97" (emphasis added).

16

Applicant respectfully submits that the Final Office Action has not met the initial burden of presenting a preponderance of evidence why a person skilled in the art would not recognize in Applicant's disclosure a description of the invention defined by the claims. The only evidence provided by the Final Office Action is that the specification does not use the specific phrase, "a computer readable medium".

MPEP 2163.02 states, "The subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement." Further, MPEP 2163(I)(B) states, "While there is no *in haec verba* requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure."

Applicant respectfully submits that a reading of the pending disclosure clearly provides implicit or inherent disclosure to those of ordinary skill in the art that the COBOL program and the COBOL routine are stored on a computer readable medium. For example, as shown in Fig. 1 the COBOL program 12 and the technical layer 10 (which includes claimed COBOL routine as shown in Fig. 2) are shown as part of the computer 14. Further, paragraph 0024 discloses, "A COBOL program 12 is provided, along with the technical layer 10, **on** a computer 14" (emphasis added). Further, paragraph 0025 discloses, "The COBOL program 12 is programmed to execute a call to one or more callable modules or routines (not shown) of the technical layer 10 to perform distributed and asynchronous processing tasks 16 on the computer 14."

Further, it is unclear how the COBOL program and the technical layer (i.e., the COBOL routine) are "on" the computer 14 and executed to perform tasks on the computer

17

14 without the COBOL program and the COBOL routine being somehow stored on a computer readable medium. Applicant respectfully submits that the disclosure cited above provides implicit or inherent disclosure such that a person skilled in the art would recognize in Applicant's disclosure a description of the COBOL program and the COBOL routine being stored on a computer readable medium. Applicant further notes Fig. 3 and paragraph 037 with regard to details discussing the COBOL program, the COBOL routine, and the computer 14 with regard to sockets and pipes in particular.

Response to Rejections under Section 102

In the Final Office Action dated August 9, 2007, Claims 1-11, 17-20 and 24-26 were rejected under 35 USC § 102(e) as being anticipated by Gungabeesoon, U.S. Patent No. 7,007,278 (hereinafter "Gungabeesoon").

Claim 1:

For at least the reasons established above in sections I-III, Applicant respectfully submits that independent Claim 1 is not anticipated by Gungabeesoon and respectfully request allowance of this claim.

Dependent Claims 2-5 are similarly not disclosed by Gungabeesoon for at least the reasons detailed in sections I-III above.

Further, Applicant respectfully notes the arguments presented in sections I-V of the response submitted on July 18, 2007.

18

Claim 6:

Claim 6 includes limitations similar to those discussed in sections II and III above. As such, the argument discussed above in sections II and III are herein repeated for Claim 6.

Dependent Claims 7-11 and 17-20 are similarly not disclosed by Gungabeesoon for at least the reasons detailed in sections II and III above.

Further, Applicant respectfully notes the arguments presented in sections II-V of the response submitted on July 18, 2007.

Claim 24:

Claim 24 includes limitations similar to those discussed in sections II and III above. As such, the argument discussed above in sections II and III are herein repeated for Claim 24.

Dependent Claims 25 and 26 are similarly not disclosed by Gungabeesoon for at least the reasons detailed in sections II and III above.

Further, Applicant respectfully notes the arguments presented in sections II-V of the response submitted on July 18, 2007.

Response to Rejections under Section 103

In the Final Office Action dated August 9, 2007, Claims 12-14 were rejected under 35 USC §103(a) as being unpatentable over Gungabeesoon in view of Vermeire et al., U.S. Patent No. 6,931,623 (hereinafter "Vermeire").

19

Claims Depending from Claim 6:

Dependent Claims 12-14 are similarly not taught or suggested by Gungabeesoon in view of Vermeire for at least the reasons detailed in sections II and III above. Applicant respectfully submits that Vermeire does not cure the deficiencies of Gungabeesoon.

In the Final Office Action dated August 9, 2007, Claims 15 and 16 were rejected under 35 USC § 103(a) as being unpatentable over Gungabeesoon in view of Ahmad et al., U.S. Patent No. 5,745,748 (hereinafter "Ahmad").

Claims Depending from Claim 6:

Dependent Claims 15 and 16 are similarly not taught or suggested by Gungabeesoon in view of Ahmad for at least the reasons detailed in sections II and III above. Applicant respectfully submits that Ahmad does not cure the deficiencies of Gungabeesoon.

In the Final Office Action dated August 9, 2007, Claims 21-23 were rejected under 35 USC § 103(a) as being unpatentable over Gungabeesoon.

Claim 21:

Claim 21 includes limitations similar to those discussed in sections I-III above. As such, the arguments discussed above in sections I-III are herein repeated for Claim 21.

Dependent Claims 22 and 23 are similarly not disclosed by Gungabeesoon for at least the reasons detailed in sections I-III above.

20

Further, Applicant respectfully notes the arguments presented in sections I-V of the response submitted on July 18, 2007.

CONCLUSION

Applicant respectfully submits that the present application is in condition for allowance for the reasons stated above. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, he is encourage to telephone the undersigned at (972) 731-2288.

The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

Respectfully submitted,

Date: October 19, 2007

Michael W. Piper
Reg. No. 39,800

CONLEY ROSE, P.C.
5601 Granite Parkway, Suite 750   ATTORNEY FOR APPLICANT
Plano, Texas 75024
(972) 731-2288
(972) 731-2289 (facsimile)

22